1023-M1-1766 Carrie Muir* (carriem@euclid.colorado.edu), Department of Mathematics, 395 UCB, Boulder, CO 80309-0395. Classroom Uses for the Game of "Dots": A Simple Bridge to Advanced Ideas.

In the game of "Dots", two players take turns connecting dots on a grid. When a player closes a space on the grid, that player has "captured" the space. When all spaces have been captured, the player who has enclosed the most spaces wins. Dots is easy enough for children to play, and requires only paper and pencil. Yet it can be used in the classroom to help students explore concepts such as mathematical modeling, symmetry, game theory, and the idea of "proof". In this talk, Dots will be demonstrated on a square grid, and examples for using this restricted version in the classroom will be given. A brief discussion of the non-square grid variant and possible uses with advanced students will also be included. (Received September 26, 2006)